

REMARKS

Claims 1 through 19 are pending in this application.

I. OBJECTION TO THE DRAWINGS

In pages 2 and 3 of the office action (Paper No. 16), the examiner objected to the drawings as allegedly failing to comply with 37 C.F.R. § 1.84(p)(5), and pointed out the following three alleged issues: 1) the drawings do not include top cover 4 and developer 5 mentioned in the description; 2) the drawings include reference numerals 21a and 82 which are not mentioned in the description; and 3) the drawings must show the limitation recited in claim 1, that is, "means for increasing expasibility [sic] of the optional auxiliary device, ... comprising a first paper transport path, a second paper transport path" where the optional auxiliary device is located on the side of the main body, a feeding unit is located on the other side of the main body, and a feeding cassette is mounted at a lower portion of the main body", or, alternatively, that limitation must be deleted from claim 1.

As to issue 1, Fig. 2 has been revised to show elements 4 and 5.

As to issue 2, elements 21a and 82 are now deleted from the drawings by the instant amendment.

As to issue 3, it should be noted preliminarily that "expasibility" was a typographic error for "expansibility". Further, claim 1 has been cancelled.

II. OBJECTION TO THE SPECIFICATION

In page 4 of the office action, the examiner objected to the specification. It is said that the passage “the main body is formed with a first, a second, and a third paper transport paths for discharging the recording paper fed from the optional device” (p. 3, lines 4-6)

is not supported in any of the figures nor in the later parts of the specification on page 13, lines 14-16, stating, “a first paper transport path 93 guides a paper sheet fed from multipurpose feeding unit assembly 20” not optional device 12 or 12' as stated on page 4, lines 4-6; and on page 13, lines 16-17, stating “a second paper transport path 94 guides a paper sheet fed from feeding cassette 15” not optional device 12 or 12' as stated on page 4, lines 4-6.

First, Lim submits that the specification (p. 3, line 9), which states “an electro photo multifunctional peripheral apparatus which has *various paper transport paths*,” lays the foundation for a first, second, and third paper transport paths. This is based on the ordinary dictionary definition of “various,” which is several different ones of the same general kind of thing. Lim respectfully submits, further, that it is sufficient that the specification supports the statement without depiction thereof in a figure. The statute (35 U.S.C. § 113) requires a drawing only “where *necessary* for the understanding of the subject matter sought to be patented.” Having various transport paths rather than just one is not something so complex that it cannot be understood without a drawing depicting it.

Second, as to whether there is a contradiction between the early part of the specifi-

cation, containing the passage “the main body is formed with a first, a second, and a third paper transport paths for discharging the recording paper fed from the optional device” (p. 3, lines 4-6), and the later parts of the specification, Lim appreciates the Examiner’s careful reading of the specification and her pointing out the ambiguity of the language used. One problem here is that the paper is fed into the apparatus by one device and is fed or guided out of it by another device. Lim submits that the ambiguity in language can be remedied by deleting from the specification the words on page 3 shown in brackets below and adding the underlined word “thereinto.”

the main body is formed with a first, a second, and a third paper
transport paths for discharging the recording paper fed [from the op-
tional device] thereinto

By deleting the bracketed words, the contradiction or ambiguity is eliminated, thereby overcoming that objection by amendment. Adding the word “thereinto” simply completes the verb “fed” and it is already implicit or inherent in feeding the paper, since where the paper is fed is into the main body of the apparatus. (Alternatively, the word “fed” could also be deleted.)

This amendment overcomes the objection by removing the passage on page 3 of the specification that is said to contradict the later passages. This leaves the later passages uncontradicted by anything else.

III. CLAIM REJECTIONS UNDER 35 U.S.C. § 112 ¶ 1

The examiner rejected claims 3-8, 10-12, and 14-16 under the first paragraph of 35 U.S.C § 112 “as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention” (page 4, second paragraph of Paper No. 16).

The examiner further states:

As to claim 3, lines 1-3 and 7-8; claim 4, lines 15-17, and 21-22; claim 10, lines 1-3, and 7-8; claim 11, lines 10-11, and 16-17; claim 14, lines 1-2, 3, and 7-8; claim 16, lines 10-11, and 15-16, “said jammed paper removing means comprises ... a rectangular base member ... and a guiding means for guiding a backward and forward movement of the feeding unit assembly” is not supported by the original specification. In the specification page 5, lines 8-10, it states “the jammed paper removing means” is composed so that one of the cover plates is formed to be resolved with a hinge shaft in the center and an elastic member is provided between the cover plate and the base member. There is never any mention of the jammed paper removing means comprising the rectangular base member and the guiding means but rather the multiple purpose feeding unit assembly comprises such structures (specification, page 4, line 16 - page 5, line 3; page 10, lines 2-5).

As to claim 4, lines 5-7, “said feeding unit comprising: at least two cover plates ... base member; ... feeding rollers... and pinch rollers” are considered as new matter. The feeding unit is element 13 as described in specification, page 9, lines 5-7. According to the specification and the drawings, the feeding unit 13 does not comprise the above elements as claimed by the instant invention.

Lim appreciates the Examiner’s careful reading of the claimed subject matter and

appreciates the opportunity to clarify the application by amending the claims in accordance with the comments of the Examiner.

As to claims 3, 4, 10, 14, and 16, and the first paragraph quoted above, the examiner points out that the specification refers to the feeding unit assembly (not the jammed paper removing means) as containing the rectangular base member and the guiding means. These claims have been amended to conform to the description set forth in the above-quoted passage from the office action. Therefore, the quoted objection has been overcome by the amendment.

As to claim 4, and the second paragraph quoted above, the examiner points out that the specification refers to the feeding unit as element 13, and that the specification and drawings do not show it as comprising two cover plates, base member, feeding rollers, and pinch rollers. Claim 4 has been amended so that the two cover plates, base member, feeding rollers, and pinch rollers are *not* recited as part of the feeding unit. The claim has thus been amended to conform to the description set forth in the above-quoted passage from the office action. Therefore, the quoted objection has been overcome by the amendment.

IV. CLAIM REJECTIONS UNDER 35 U.S.C. § 112 ¶ 2

The examiner rejected claims 1, 4, 5, 11, and 12 under the second paragraph of 35 U.S.C. § 112 “as being indefinite for failing to particularly point out and distinctly claim

the subject matter which applicant regards as the invention" (page 5, last paragraph of Paper No. 16).

The examiner further stated [bracketed numbers added]:

[1] As to claim 1, line 10, "a means for increasing expansibility [sic] of the optional auxiliary device ... comprising a first paper transport path, a second paper transport path, and a third paper transport path" is unclear. Since there is no mentioning in the original specification of "a means for increasing expansibility [sic]" except for the phrase "expansibility of the optional device" in the specification, page 8, line 18, it is not clear how the paths are means for increasing expansibility of the optional device 12 or optional device such as duplex module 12'. The first transport path 93 and the second transport path 94 do not have any structural relationship to optional device 12 or 12'. The first transport path 93 feeds paper sheets from the feeding unit assembly into the main body 10 not into the optional device 12 or 12'; and the second transport path 94 feeds paper sheets from the feeding cassette 15 into the main body 10 not into the optional device 12 or 12'. The specification is silent to how these paths are "means for increasing expansibility of the optional auxiliary device" if the optional auxiliary device is element 12 or 12'. It appears that applicant attempted to place several embodiments of the instant invention into one claim.

[2] As to claim 4, lines 6-7, "the upper face" and "the base member" lack antecedent basis.

[3] As to claim 4, line 18, "at least one cover plate mounted on an upper face of the base member" is vague and indefinite. There is already a previous recitation of "at least two cover plates mounted on the upper face of the base member" in claim 4, lines 6-7. How many cover plates are there mounted on the base member?

[4] As to claim 4, line 17, "a rectangular base member" is vague and indefinite since there is already a previous recitation of a base member in lines 6-7. Are these the same base member or different ones?

[5] As to claim 4, line 19, "paper feeding means" is vague and unclear because in lines 8-11, "a plurality of powered feeding roll-

ers” and “a plurality of pinch rollers” are the same as the paper feeding means.

[6] As to claim 11, line 13, “paper feeding means” is vague and unclear because in lines 18-21, “a plurality of powered feeding rollers” and “a plurality of pinch rollers” are the same as the paper feeding means.

[7] Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections, See MPEP § 2172.01. The omitted structural cooperative relationships are: the first transport path 93 and the second transport path 94 does not have any structural relationship to optional device 12 or 12'. So, it is not clear how these paths are “means for increasing expansibility [sic] of the option auxiliary device” as recited in claim 1, lines 10-11. In addition, it is not shown in the drawings where this is possible. It appears that applicant attempted to place several embodiments of the instant invention into one claim.

The foregoing points are discussed below in sections where the subject matter corresponding to the respective bracketed numbers begin with the same numbers in boldface. Lim appreciates the Examiner’s careful reading of the claimed subject matter and appreciates the opportunity to clarify the application by amending the claims in accordance with the comments of the Examiner.

1. Claim 1 was cancelled. That moots the rejection.
2. In claim 4, antecedents have been provided for “the upper face of the base member” by moving “at least two cover plates mounted on the upper face of the base member” farther down in the claim and placing “a rectangular base member having an upper face” early in the claim as a recited element. That overcomes the rejection.

3. The “at least one cover plate mounted on an upper face of the base member” formerly at line 18 has been eliminated. That overcomes the rejection.

4. The first recitation of the base member is now preceded by “a” and the later ones by “the”. That overcomes the rejection.

5. The paper feeding means was deleted from claim 4. That overcomes the rejection.

6. The paper feeding means in claim 11 is now recited as comprising the feeding and pinch rollers. That overcomes the rejection.

7. Claim 1 is cancelled. That moots the rejection.

V. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

There are nine obviousness rejections:

(1) In paragraph 1 on page 8 of the office action, the examiner rejected claim 1 under 35 U.S.C. § 103(a) for alleged unpatentability over “Applicant's Admitted Prior Art (Preamble - Jepson Claim) in view of Sasaki et al. U.S. Patent No. 4,787,616.

(2) In paragraph 1 on page 9 of the office action, the examiner rejected claim 1 under 35 U.S.C. § 103(a) for alleged unpatentability over Sasaki in view of Takahashi et al. U.S. Patent No. 5,379,101 and Arai U.S. Patent No. 6,145,828.

(3) In the last paragraph on page 13 of the office action, the examiner rejected claims 2, 3, 6, 7, 9, 10, and 13-18 under 35 U.S.C. § 103(a) for alleged unpatentability

over Applicant's Admitted Prior Art (Preamble - Jepson claim and specification, page 2, lines 17-18) in view of Arai, Tominaga Japanese Patent Publication No. 10-324435 and Oka et al. Japanese Patent Publication No. 11-79427.

(4) In the last paragraph on page 18 of the office action, the examiner rejected claims 2, 3, 7, 9, 10, 13-15, and 18 under 35 U.S.C. § 103(a) for alleged unpatentability over Applicant's Admitted Prior Art (Preamble - Jepson claim and specification, page 2, lines 17-18) in view of Arai.

(5) In the first paragraph on page 24 of the office action, the examiner rejected claims 2, 3, 7, 9, 10, 13-15, and 18 under 35 U.S.C. § 103(a) for alleged unpatentability over Sasaki in view of Arai.

(6) In the first paragraph on page 30 of the office action, the examiner rejected claims 2, 3, 7, 9, 10, and 13-18 under 35 U.S.C. § 103(a) for alleged unpatentability over Sasaki in view of Arai, Tominaga and Oka.

(7) In the first paragraph on page 35 of the office action, the examiner rejected claims 8 and 19 under 35 U.S.C. § 103(a) for alleged unpatentability over Applicant's Admitted Prior Art (Preamble - Jepson Claim) in view of Arai, Tominaga, Oka, and further in view of Mochimaru U.S. Patent No. 4,605,299.

(8) In the second complete paragraph on page 36 of the office action, the examiner rejected claims 8 and 19 under 35 U.S.C. § 103(a) for alleged unpatentability over Sasaki

in view of Arai, Tominaga, Oka, and further in view of Mochimaru.

(9) In the third complete paragraph on p. 37, the examiner rejected claims 4 and 11 under 35 U.S.C. § 103(a) for alleged unpatentability over Sasaki in view of Arai, Tominaga, Kato, and Oka.

A. Level of Skill

All of the § 103(a) rejections in this case are based on ~~what~~ allegedly “would have been obvious to one of ordinary skill in the art at the time the invention was made.” This phrase is repeated well over a dozen times in Paper No. 16.

As Lim has pointed out repeatedly in response to the many prior obviousness rejections in this case, and in his recent appeal brief, it is settled law in the Federal Circuit that an obviousness rejection must be supported by findings as to the ordinary level of skill in the pertinent art and such findings must be supported in turn by substantial evidence. Neither findings on ordinary level of skill or supporting substantial evidence is present in the administrative record made by the Examining Staff. Lim therefore respectfully refers to his appeal brief on this issue and incorporates herein by reference the appeal brief's discussion of the issue. To this, Lim adds that it is believed, based on the present state of the record, that the ordinary level of skill in the pertinent art is that of an ordinary mechanical artisan such as a mechanic in an automobile repair shop. Accordingly, Lim's subsequent arguments on inherency and the like are based on what would be

known by a common or ordinary mechanic of ordinary skill.

The lack of findings on level of skill, that are supported by substantial evidence of record, applies to every § 103 rejection in this case. Therefore, Lim respectfully submits that each such rejection would be reversible on that ground, without more, under governing Federal Circuit law. *In re Dembiczak*, 175 F.3d 994, 1000-01; 50 U.S.P.Q.2d 1614, 1618 (Fed. Cir. 1999) (holding that an obviousness rejection must be reversed if it fails to contain “specific findings of fact regarding the level of ordinary skill in the art.”).

B. Claim 2

Claim 2 is an independent apparatus claim directed to an electro photo multifunctional peripheral apparatus. The claim is rejected, first, on the basis of a combination of allegedly admitted prior art, Arai, Tominaga, and Oka. Second, the claim is further rejected on the basis of a combination of allegedly admitted prior art and Arai. Third, the claim is further rejected on the basis of a combination of Sasaki and Arai. Fourth, the claim is further rejected on the basis of a combination of Sasaki, Arai, Tominaga, and Oka.

1. Admitted prior art, Arai, Tominaga, and Oka

Paper No. 16 (pp. 16-17) states:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Applicant's Admitted Prior Art with that of Arai, Tominaga, and Oka et al. because there is a problem with manufacturing the linkage of Arai due

to the fact it requires many components or features.... The manufacturing of this linkage can be costly. Thus, using a tension spring 18 of Tominaga would be simple and cost effective since it reduces the number of components and features needed to allow two plates to separate and permit removal of jammed sheets or documents along a paper transport path.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Applicant's Admitted Prior Art with that of Arai, Tominaga, and Oka et al. because the main frame 30 of Arai is supported by two guide rails 35 that can be withdrawable frontward from the main body 1. When loading the main frame 30 back into the main body 1, an operator may force the main frame 30 into the main body 1 with too much force, thus dislocating its position or causing damage to the parts of the main frame. In order to solve this problem which Oka et al. recognizes, one looks to Oka et al. to use elastic rollers as a way to guide a member to slide on a fixed rail so that absorption of shock can be prevented as disclosed by Oka et al.

That is the only statement in Paper No. 16 that even tangentially addresses teaching, suggestion, or motivation in the prior art to combine the references relied upon (i.e., allegedly admitted prior art, Arai, Tominaga, and Oka). But it suffers from multiple defects that require withdrawal of the rejection.

a. First, this is not a reasoned explanation of why to combine together all four references -- (i) allegedly admitted prior art, (ii) Arai, (iii) Tominaga, and (iv) Oka. Rather, it is an explanation, first, of why to combine Arai and Tominaga to obtain a hypothetical composite of the Arai linkage and Tominaga's spring. Then, it is separately proposed to combine Arai's main frame and Oka's elastic rollers. But no explanation is even purported to be given as to why an artisan would be motivated to combine together all four

references -- allegedly admitted prior art, Arai, Tominaga, and Oka. The case-law requires an explanation of motivation to combine all four cited references together *en masse*, not an explanation of how to do it in separate little steps (which in this case also do not even add up to the whole combination). The office action cites to no specific teaching, suggestion, or motivation in the prior art to combine the ensemble.

b. Furthermore, even disregarding the first problem, the quoted statement does not remotely come close to what the Federal Circuit requires. It is simply a conclusory assertion totally lacking in any specific explanation of why an artisan would be motivated by something in the prior art to combine the references, rather than instead try to make the hundreds or thousands of other possible combinations of references in the pertinent art that could be hypothesized (just as the instant combination is hypothesized).

There are also gaps in the logic. Statements such as “one looks to Oka” explain nothing, because the office action states no specific reason for one to look to Oka instead of looking elsewhere (perhaps to *The Hitchhikers Guide to the Galaxy*) or looking down a hole. On this record, the only reason to look to Oka “to use elastic rollers as a way to guide a member to slide on a fixed rail so that absorption of shock can be prevented as disclosed by Oka” is pure 20-20 hindsight. A rejection cannot properly be based on the unsupported statement, “One looks to . . . [x]” when there is no basis given in the record to establish why one would “look to” x (the cited item, such as Oka) rather than looking

elsewhere. That is no better than the looking to the examiner's subjective state of mind, which the Federal Circuit forbade in *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002), and *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001) (“With respect to core factual findings in a determination of patentability” PTO “must point to concrete evidence in the record” and “cannot simply reach conclusions based on its own understanding or experience”).

c. The quoted “explanation” for why an ordinary artisan would be motivated to combine the references further uses hindsight by working backwards from the advantages of the invention disclosed here to the references. The statement that using Tominaga's tension spring “would be simple and cost effective since it reduces the number of components and features needed to allow two plates to separate and permit removal of jammed sheets ...” uses the advantage of combining Tominaga with Arai as the alleged motivation. But how is an artisan supposed to recognize that combining these particular two references would be a good way to get the above-stated advantages without first being given something in the prior art that teaches, suggests, or motivates the combination? Where is the prior art “something”? Not in this record.

d. What the office action did here stands in stark contrast to what the Federal Circuit requires. Thus, in *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002), the court held that “the central question is whether there is reason to combine [the] references,” a question of fact drawing on the *Graham* factors,” citing *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339,

1351-52, 60 USPQ2d 1001, 1008 (Fed. Cir. 2001). The *Lee* court then went on to add (citations omitted):

The factual inquiry whether to combine references must be thorough and searching. It must be based on objective evidence of record. This precedent has been reinforced in myriad decisions, and cannot be dispensed with.

The *Lee* court then addressed the same defect--utter lack of *specificity*--~~that~~ pervasively characterizes the instant rejection. It said:

The need for specificity pervades this authority. See, e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000) ("particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed")

The court pointed to the unspecific and meager explanation that the PTO gave for combining the references and found that the rejection did not measure up to APA standards. What the Federal Circuit said of the *Lee* rejection applies with equal or greater force to the instant rejection:

With respect to Lee's application, neither the examiner nor the Board adequately supported the selection and combination of the Nortrup and Thunderchopper references to render obvious that which Lee described. The examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is mate-

rial to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to “[use] that which the inventor taught against its teacher.” *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion.

Not only does this record lack the explanation and findings that *Lee* and prior decisions such as *In re Dembiczak*, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999), require but the instant record lacks substantial evidence to support such findings even if they had been made. This record is a vast wasteland when it comes to motivation in the prior art to combine the references.

Yet, the command of the Federal Circuit in *Lee* and other precedents is that the decision of the PTO must be supported by substantial evidence that furnishes a basis for the findings. The *Lee* court said that it is “the obligation of the agency to make the necessary findings and to provide an administrative record showing the evidence on which the findings are based, accompanied by the agency's reasoning in reaching its conclusions. See *In re Zurko*, 258 F.3d 1379, 1386, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001)....” And in *In re Gartside*, 203 F.3d 1305, 1314, 53 USPQ2d 1769, 1774 (Fed. Cir. 2000), the Federal Circuit held that a PTO decision “must be justified within the four corners of the record.” Then, in *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001), the Federal Circuit

held: “With respect to core factual findings in a determination of patentability” PTO “must point to concrete evidence in the record” and it “cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense.” See also *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962): “The agency must make findings that support its decision, and those findings must be supported by substantial evidence.”

In addition, the rejection of claim 2 does not “explain the reasoning by which the [nonexistent] findings are deemed to support the agency's conclusion [of motivation].” But *Lee* expressly requires that.

e. There is a confusing assertion of some kind of equivalency at p. 18 of the office action. Lim does not understand the language on p. 18 about “elements of the combination of references of Applicant's Admitted Prior Art in view of Arai, Tominaga, and Oka et al. are the same or equivalent to the elements of the instant invention as described in the specification of the instant invention....” However, Lim respectfully points out that equivalency is a fact issue, and if equivalency is asserted the PTO has the burden of establishing it by findings supported with substantial evidence. See *In re Donaldson Co.*, 16 F.3d 189, 29 U.S.P.Q.2d 1845 (Fed. Cir. 1994)(en banc); *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). There are no clear findings here and no citation of substantial evidence of record for support thereof.

2. Admitted prior art and Arai

Paper No. 16 (pp. 18-19) states that claim 2 is rejected as obvious from the combination of allegedly admitted prior art and Arai. The following discussion (starting at the bottom of p. 19) then addresses combining Sasaki and Arai instead of addressing combining allegedly admitted prior art and Arai. Lim respectfully submits that this is not a proper explanation and the office action should be withdrawn and then rewritten so that the applicant can understand what the PTO is trying to do here.

Further, on p. 21 the assertion is made that linkage 34 of Arai is equivalent to Lim's elastic spring member. The office action contains no explanation of how a linkage is insubstantially different from an elastic spring member. The office action contains no explanation, or supporting findings or evidence, as to why a linkage operates in substantially the same way as an elastic spring member. In fact, an ordinary mechanic would know that a linkage does not work substantially the same way as an elastic spring member. *Please see the accompanying BUSHNELL DECLARATION so stating.* The conclusory assertion of Paper No. 16 suggesting that a linkage operates in substantially the same way as an elastic spring member does not comply with the Federal Circuit's requirement, see *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001) (“With respect to core factual findings in a determination of patentability” PTO “must point to concrete evidence in the record” and “cannot simply reach conclusions based on its own understanding or experi-

ence—or on its assessment of what would be basic knowledge or common sense”), that the PTO follow Administrative Procedure Act (APA) standards for making specific fact findings supported by substantial evidence of record.

The assertion is made at pp. 21-22 that the instant specification does not explain how the elastic member functions in the invention is incorrect. However, for purposes of this Amendment it may be assumed, *arguendo*, that the function of the member is as stated on p. 22 of the office action. Moreover, it can be assumed, *arguendo*, that the function of the elastic member is as stated at p. 22 the same as that of Arai's linkage. But that does not make equivalency.

The Federal Circuit has held it error to assume that two structures are equivalent simply because they perform the same function. *Roton Barrier, Inc. v. Stanley Works*, 79 F.3d 1112, 1126-27 (Fed. Cir. 1996); *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934 (Fed. Cir. 1987) (en banc) (“Pennwalt erroneously argues that, if an accused structure performs the function required by the claim, it is per se structurally equivalent”), *cert. denied*, 485 U.S. 961 (1988). The conclusory assertion of performing in the same way to achieve the same result is unsupported by explanation, fact findings, or evidence -- and it is wrong. A linkage clearly does not operate the same way that a spring does and no authority is cited to support the erroneous assertion. See *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001) (“With respect to core factual findings in a determination of

patentability” PTO “must point to concrete evidence in the record” and “cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense”). Further, a linkage and a spring are manifestly *not* merely insubstantially different. They are therefore not equivalents. The lack of equivalency of a tension spring and linkage is further attested in the accompanying Bushnell declaration, which points out how a linkage and tension spring operate in different ways and accomplish different results.

Similarly, the assertion of equivalency for the rails of Arai and rollers of Lim is unsupportable, for the very same reasons as just stated above. Even more, in *Chiuminatta Concrete Concepts v. Cardinal Indus., Inc.*, 145 F.3d 1303, 46 U.S.P.Q.2d 1752 (Fed. Cir. 1997), the Federal Circuit expressly held that a rail and roller were inequivalent and explained why. Once again the PTO mistakenly equates *same function* and *equivalency*, contrary to *Roton Barrier* and *Pennwalt, supra*,

3. Arai and Sasaki

Paper No. 16 (p. 24) states that claim 2 is rejected as obvious from the combination of Arai and Sasaki. The same arguments are made again as the PTO made for the combination addressed above. Lim therefore respectfully incorporates herein by reference his preceding arguments.

4. Sasaki, Arai, Tominaga, and Oka

Paper No. 16 (p. 30) states that claim 2 is rejected as obvious from the combination of Sasaki, Arai, Tominaga, and Oka. The same arguments are made again as the PTO made for the combination addressed above. Lim therefore respectfully incorporates herein by reference his preceding arguments.

C. Claims 3, 7, 9, 10, and 13-18

Claim 3 depends from claim 2. Claim 7 depends from claim 3. Claim 9 is an independent method claim directed to a method of facilitating removal of a paper jam in an electro photo multi functional peripheral apparatus, by using a device comparable to the apparatus of claim 2. Claim 10 depends from claim 9. Claim 13 is a process claim directed to a process for manufacturing an electro photo multifunction apparatus, where the apparatus is provided with a paper jam removal means comparable to the device of claim 2. Claims 14-15 and 17-18 depend directly or indirectly from claim 13, and claim 16 is comparable to such claims.

These claims stand rejected on the same bases as claim 2. Lim therefore respectfully incorporates herein by reference his arguments made above for claim 2.

D. Claims 8 and 19

Claim 8 depends from 3 and claim 19 depends from claim 14. Claims 8 and 19 differ from their respective base claims by having as a further limitation position guiding members that are inserted into position guiding holes.

1. Paper No. 16 (p. 35) states that claims 8 and 19 are rejected on the basis of a combination of allegedly admitted prior art, Arai, Tominaga, Oka, and Mochimaru.

The supposed rationale for the combination of these five different references is:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Applicant's Admitted Prior Art (Preamble - Jepson Claim) in view of Arai, Tominaga, and Oka et al. with that of Mochimaru *so that the main frame 30 of Arai can be easily positioned within the image forming apparatus without difficulty as the frame 30 is loaded back into the image forming apparatus*. It is inherent in Mochimaru that the positioning pins are received in respective holes so that the removable main frame 30 can be securely positioned inside the image forming apparatus.

The italicized words are the result of making the combination of selected elements found in the cited references, once the combination has been made. But that cannot provide a teaching, suggestion, or motivation *a priori* to combine the references. That is a hindsight basis for combining references, which works backwards from the advantages of Lim's invention, once a person has been taught the invention by Lim, to the inspiration for making the invention, which is otherwise nonexistent. That is not a showing of a specific teaching, suggestion, or motivation *in the prior art* to combine the references, as required in *In re Lee*, 277 F.3d 1338 (Fed. Cir. 2002). Accordingly, there is not substantial evidence to support the combination and thus the rejection. *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001) ("With respect to core factual findings in a determination of patentability" PTO "must point to concrete evidence in the record"). A rejection that is

not supported by substantial evidence cannot stand. *Id.*

Further, the statement that it is inherent in Mochimaru that the positioning pins are received in respective holes so that the removable main frame 30 can be securely positioned inside the image forming apparatus is not supported by substantial evidence. Inherency is a fact issue, *In re Schreiber*, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997), which must be proved by substantial evidence ~~that the~~ allegedly inherent result necessarily and invariably occurs all of the time in such situations. See, e.g., *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (“To establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill.’ ... ‘Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’”). Furthermore, it must be shown by evidence from the prior art that persons of ordinary skill in the art knew of the allegedly inherent matter. See *Elan Pharmaceuticals, Inc. v. Mayo Foundation for Medical Education and Research*, No. 00-1467, p. 11 (Fed. Cir. Aug. 30, 2002) (“[T]here was no evidence that the formation and detection of ATF-betaAPP in the transgenic mouse brain with the Swedish mutation was known to persons of ordinary skill in the field of the invention. Inherency cannot be based on the knowledge of the inventor; facts asserted to be inherent in the

prior art must be shown by evidence from the prior art. Cf. *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999) (criticizing the 'hindsight syndrome wherein that which only the inventor taught is used against its teacher')."). There is no supporting prior-art evidence in this record for the statement in the office action. Therefore, the rejection is not supported by substantial evidence.

2. Claims 8 and 19 are also rejected (p. 36) on the basis of Sasaki, Arai, Tominaga, Oka, and Mochimaru. The supposed rationale for the combination of these five different references is:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Sasaki et al. in view of Arai, Tominaga, and Oka et al. with that of Mochimaru *so that the main frame 30 of Arai can be easily positioned within the image forming apparatus without difficulty as the frame 30 is loaded back into the image forming apparatus*. It is inherent in Mochimaru that the positioning pins are received in respective holes so that the removable main frame 30 can be securely positioned inside the image forming apparatus.

The italicized words, "so that the main frame 30 of Arai can be easily positioned within the image forming apparatus without difficulty as the frame 30 is loaded back into the image forming apparatus," state what result will occur *if* you combine selected elements of the cited references. But that cannot provide a teaching, suggestion, or motivation *a priori* to combine the references. That is a hindsight basis for combining references, which works backwards from the results of Lim's invention, once a person has

been taught the invention by Lim, to the inspiration for making the invention, which is otherwise nonexistent. That is not a showing of a specific teaching, suggestion, or motivation *in the prior art* to combine the references, as required in *In re Lee, supra*. Accordingly, there is not substantial evidence to support the combination and thus the rejection. *In re Zurko, supra*. A rejection that is not supported by substantial evidence cannot stand. *Id.*

As to the inherency point, Lim respectfully incorporates herein by reference his remarks on inherency in immediately preceding paragraph “1.”

3. In addition, the claim construction by which the office action finds elements of the cited art to be present in the instant claims is defective. The office action states:

Since applicant's representatives argue using *In re Donaldson* and § 112, 6th par. for the limitations of “the jammed paper removing means,” examiner points out to the applicant's representatives that MPEP 2106 (II)(C) says “the claimed means plus function limitations” are given “their broadest reasonable interpretation consistent with all corresponding structures or materials described in the specification *and their equivalents* including the manner in which the claimed functions are performed”. See *Kemco Sales, Inc v. Control Papers Company, Inc.*, 208 F. 3d 1352, 54 USPQ2d 1308 (Fed. Cir. 2000). Thus, in the specification, page 12, lines 14-17, it states that “the jammed paper removing means is so constructed that a [sic] one of cover plates 23 and 23’ is formed to be resolved with a hinge shaft 81 in the center an elastic member such as a tension coil spring is provided between the cover plate 23 and base 21” and page 13, lines 2-3, it states, “the jammed paper removing means may be advantageously provided at the other cover plate 23’. This “jammed paper removing means” is interpreted as having alternatives since it is not clear from the language in the original specification. The “jammed

paper removing means” may be the cover plate 23 or cover plate 23’ or both plates 23, 23’. Since the Office personal are to give the claimed means plus function limitations their broadest reasonable interpretations described by the specification, elements of the combination of references of Sasaki et al. in view of Arai, Tominaga, and Oka et al. *are the same or equivalent to the elements of the instant invention as described in the specification of the instant invention* which has been identified as corresponding to the claimed “jammed paper removing means”.

Lim respectfully notes that the broadest reasonable interpretation does not include an unreasonable interpretation. Things cannot be said to be the same when they are manifestly different. Furthermore, and this is essential, equivalency cannot be declared by PTO fiat. Equivalency is a fact issue on which fact-specific analysis and findings must be made. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). The PTO’s analysis must be supported by substantial evidence or it will not be sustained. *In re Gartside*, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000); see *In re Zurko*, 258 F.3d 1379, 1385-86 (Fed. Cir. 2001) (“With respect to core factual findings in a determination of patentability” PTO “must point to concrete evidence in the record” and “cannot simply reach conclusions based on its own understanding or experience—or on its assessment of what would be basic knowledge or common sense”). Furthermore, the PTO cannot conclude that two things are equivalents simply because both of them perform the same function. *Roton Barrier, Inc. v. Stanley Works*, 79 F.3d 1112, 1126-27 (Fed. Cir. 1996); *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934 (Fed. Cir. 1987) (en banc) (“Pennwalt

erroneously argues that, if an accused structure performs the function required by the claim, it is per se structurally equivalent”), *cert. denied*, 485 U.S. 961 (1988). The things must be insubstantially different from one another, for example because they perform the same function *in substantially the same way and accomplish substantially the same result*. See *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997). In the instant case, there are no specific findings of equivalency directed to named elements of Sasaki, Arai, Tominaga, and Oka, backed by substantial evidence of record. Therefore, the PTO is not entitled to leapfrog over the requirement for a record by simply referring to the rule about broadest *reasonable* construction. In addition, Lim has submitted contrary evidence. *Please see the accompanying BUSHNELL DECLARATION*

E. Claims 4 and 11

Claims 4 and 11 are rejected (p. 37) on the basis of a combination of Sasaki, Arai, Tominaga, Kato, and Mochimaru. The supposed rationale for the combination of these five different references is:

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Sasaki et al. with that of Arai, Tominaga, Kato et al., and Oka et al. *because there is a problem with manufacturing the linkage of Arai due to the fact it requires many components or features such as an engage pin 70, a first slot 71, a second slot 72, a turning pin 65, and a grip portion 63* (note Arai; column 8, line 66 - column 9, line 18). The manufacturing of this linkage can be costly. *Thus, using a tension spring 18 of Tominaga would be simple and cost effective since it reduces the number of components and features needed to allow two plates to*

separate and permit removal of jammed sheets or documents along a paper transport path.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Sasaki et al. with that of Arai, Tominaga, Kato et al., and Oka et al. *because if only one cover of Arai was used to remove paper jams the cover would have to be very large in order to remove different sizes of paper used. This would make the paper removal system of Arai cumbersome to operate.* One looks to Kato et al. in order to solve this problem where two shorter covers are used to uncover a sheet path to remove the sheet jam.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the apparatus of Sasaki et al. with that of Arai, Tominaga, Kato et al., and Oka et al. *because the main frame 30 of Arai is supported by two guide rails 35 that can be withdrawable frontward from the main body 1.* When loading the main frame 30 back into the main body 1, an operator may force the main frame 30 into the main body 1 with too much force, thus dislocating its position or causing damage to the parts of the main frame. In order to solve this problem which Oka et al. recognizes, one looks to Oka et al. to use elastic rollers as a way to guide a member to slide on a fixed rail so that absorption of shock can be prevented as disclosed by Oka et al.

First, this rationale repeatedly relies on “one looks to . . .” without giving a reason *based on the record* why one looks there instead of looking someplace else. Lim respectfully incorporates herein by reference his previous remarks about “one looks to.”

Second, the first italicized passage, “because there is a problem with manufacturing the linkage of Arai due to the fact it requires many components or features such as an engage pin 70, . . .” is a statement of a problem that Lim noticed, but the office action cites nothing in the prior art that recognizes this problem. Recognition of a problem can

constitute invention, even if the solution is simple once one recognizes the problem. *Eibel Process Co. v. Minnesota & Ontario Paper Co.*, 261 U.S. 45 (1923). The first italicized passage therefore cannot properly form part of the rationale for combining the references. It is a broken link in the chain of reasoning used here, and therefore the chain fails.

Third, the next italicized passage is: “Thus, using a tension spring 18 of Tominaga would be simple and cost effective since it reduces the number of components and features needed to allow two plates to separate and permit removal of jammed sheets or documents along a paper transport path.” The *thus* at the beginning is unsupported, since it follows from the erroneous premise discussed in the preceding paragraph, namely, that the discovery of the problem existed in the prior art instead of being discovered by Lim. Further, the rest of the passage is a statement of the beneficial advantages realized by combining the selected elements of the references. That is not an *a priori* teaching, suggestion, or motivation in the prior art to select and combine the given elements of the cited references. It is hindsight, working backwards from the invention to bootstrap from the invention a teaching, suggestion, or motivation to make the invention. This is another broken link in the chain of reasoning used here, and therefore the chain fails.

Fourth, the next italicized passage is: “because if only one cover of Arai was used to remove paper jams the cover would have to be very large in order to remove different

sizes of paper used. This would make the paper removal system of Arai cumbersome to operate.” That is not a teaching, suggestion, or motivation in the prior art to combine the cited references or elements of them. It is noted that Arai's patented invention worked with his cover. Why would an artisan of ordinary skill consider it so cumbersome that he would be motivated to combine these particular items of prior art to alleviate the cumbersomeness? There is nothing of record in this case to answer that. This is another broken link.

Fifth, the last italicized passage, “because the main frame 30 of Arai is supported by two guide rails 35 that can be withdrawable frontward from the main body 1,” is not a statement of a teaching, suggestion, or motivation in the prior art to combine the cited references. It is just a description of Arai's device. This does not even pretend to be, as it must to withstand review under governing Federal Circuit law, a statement of a specific teaching, suggestion, or motivation in the prior art to combine the references, per *In re Lee, supra*. This is another broken link.

The chain of reasoning that is supposed to support this rejection has more broken links in it than unbroken ones. Any one broken link is enough to make the chain ineffective. Lim respectfully submits, therefore, that the rejection cannot be sustained and should be withdrawn.

**VI. INHERENCY ISSUES CONCERNING TENSION
SPRINGS AND ELASTIC MEMBERS**

Reference is made to the BUSHNELL DECLARATION (cited "Bushnell Dec. ¶ __) submitted in conjunction with this Amendment.

The statement, "Specifically the statement `which is resisted by the elastic member (e.g. tension coil spring)' is not supported by the specification nor is inherent from the specification or the drawings," is made in the office action. Lim traverses this statement and invites to the attention of the examiner the following statement (Bushnell Dec. ¶ 6):

When a mechanical assembly to which an elastic spring member such as a tension spring is attached (the mechanical assembly being attached to one end of the spring and a base or comparable structure being attached to the other end of the spring) is pulled, the elastic member resists the pull and stores energy as it is stretched in response to the pull. Nearly every mechanic of ordinary skill knows that and they knew it many years prior to Lim's invention. Referring to Fig. 6 mentioned on p. 43 of Paper No. 16, what I just described is inherent from the description or the drawing, in the sense that it necessarily and invariably will occur as described. Nearly every mechanic of ordinary skill knows that and they knew it many years prior to Lim's invention.

The office action makes the statement, "Specifically the statement `the stored mechanical energy of the elastic member is released as this occurs' is not supported by the specification nor is inherent from the specification or the drawings." Lim traverses this statement and invites to the attention of the examiner the following statement (Bushnell Dec. ¶ 6):

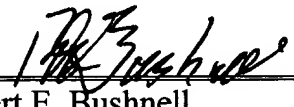
Also, when a tension spring has been extended as described on p. 43 of Paper No. 16, and then is released to permit position guiding

members to enter into position guiding holes with which the members are in registration, mechanical energy which has been stored in the spring is released and the members are pressed into the holes. What I just described is inherent from the description or the drawing, in the sense that it necessarily and invariably will occur as described. Nearly every mechanic of ordinary skill knows that and they knew it many years prior to Lim's invention.

It is therefore respectfully submitted that the statements quoted from the office action are contradicted and overcome by the declaration. In this connection, Lee respectfully invites to the examiner's attention the holding in the *Schreiber* case, *supra*, where the Federal Circuit held that factual evidence may properly be adduced in connection with a determination of inherency.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited.

Respectfully submitted,



Robert E. Bushnell,
Attorney for the Applicant
Registration No.: 27,774

1522 K Street N.W., Suite 300
Washington, D.C. 20005
(202) 408-9040

Folio: P56132
Date: 10/9/2
I.D.: REB/RHS

MARKED-UP VERSION OF AMENDMENTS
IN THE CLAIMS

Please cancel claim 1 without prejudice or disclaimer of its subject matter, and amend claims 3 through 5, 10, 11, 14 and 16 as follows:

1 3 (amended thrice). The apparatus of claim 2, wherein
2 said [jammed paper removing means] feeding unit assembly comprises:
3 a rectangular base member having an upper face; and
4 [at least one cover plate mounted on an upper face of the base member; paper feeding
5 means for feeding the sheets of recording paper, said paper feeding means mounted at
6 the cover plate; and]
7 a guiding means for guiding a backward and forward movement of the
8 feeding unit assembly;
9 said jammed paper removing means comprises at least one cover plate mounted on the
10 upper face of the base member; and
11 a paper feeding means for feeding the sheets of recording paper is mounted at the
12 cover plate.

1 4 (amended forth). An electro photo multi functional peripheral apparatus
2 comprising:
3 a main body having an optional auxiliary device located at a first side

thereof;

a feeding unit for feeding sheets of recording paper, located at a second side of the main body;

[, said feeding unit comprising:]

[at least two cover plates mounted on the upper face of the base member;]

[a plurality of powered feeding rollers mounted on a rear side of the base member; and a plurality of pinch rollers rotatably mounted at the cover plates and located opposite the feeding rollers; and]

a feeding unit assembly removably mounted at a central portion of the main body, for transporting the sheets of recording paper which the feeding unit feeds, the feeding unit assembly comprising:

[a jammed paper removing means for easily removing a jammed sheet of paper, said jammed paper removing means comprising:]

a rectangular base member having an upper face and a rear side; and

[at least one cover plate mounted on an upper face of the base member;]

[paper feeding means for feeding the sheets of recording paper, said paper feeding means mounted at the cover plate; and]

a guiding means for guiding a backward and forward move-

1 5 (amended thrice). The apparatus of claim 4, wherein:
2 at least one cover plate of said jammed paper removing means comprises a hinge shaft
3 centrally located in said cover plate, said hinge shaft adapted for revolving said
4 cover plate; and
5 [wherein] an elastic spring member is provided between the cover plate and the base
6 member.

-42-

4 [at least one cover plate mounted on an upper face of the base member;
5 paper feeding means for feeding the sheets of recording paper, said paper
6 feeding means mounted at the base member and the cover plate; and]
7 a guiding means for guiding a backward and forward movement of the
8 feeding unit assembly; and
said jammed paper removing means is mounted at the base member and the cover
plate.

1 11 (amended thrice). A method of facilitating removal of a paper jam in an
2 electro photo multi functional peripheral apparatus comprising:

3 a main body having an optional auxiliary device located at a first side thereof;

4 a feeding unit for feeding sheets of recording paper, located at a second side of
5 the main body;

6 a feeding unit assembly removably mounted at a central portion of the main
7 body, for transporting the sheets of recording paper which the feeding
8 unit feeds,

9 said method comprising the steps of:

10 (1) providing the apparatus with a jammed paper removing means for easily
11 removing a jammed sheet of paper, said jammed paper removing means

comprising:

a rectangular base member;

at least two cover plates mounted on an upper face of the
base member;

paper feeding means for feeding the sheets of recording
paper, said paper feeding means mounted at the base
member and the cover plates, said paper feeding means
comprising:

a plurality of powered feeding rollers mounted

on a rear side of the base member; and

a plurality of pinch rollers rotatably mounted

at the cover plates and located opposite

the feeding rollers;

a guiding means for guiding a backward and forward move-
ment of the feeding unit assembly;

[a plurality of powered feeding rollers mounted on a rear side of the base member; and
a plurality of pinch rollers rotatably mounted at the cover plates and located opposite
the feeding rollers]

(2) detecting a paper jam; and

31 (3) operating the jammed paper removing means in a manner such that the pa-
32 per jam is removed.

1 14 (amended thrice). The process of claim 13, wherein
2 said [jammed paper removing means] feeding unit assembly comprises:
3 a rectangular base member having an upper face; and
4 [at least one cover plate mounted on an upper face of the base member;
5 paper feeding means for feeding the sheets of recording paper, said paper
6 feeding means mounted at the base member and the cover plate; and]
7 a guiding means for guiding a backward and forward movement of the
8 feeding unit assembly;
9 said jammed paper removing means comprises at least one cover plate mounted on the
10 upper face of the base member; and
11 a paper feeding means for feeding the sheets of recording paper is mounted at the base
12 member and the cover plate.

13 16 (amended twice). A process for manufacturing an electro photo
14 multifunction apparatus, said process comprising the steps of:

(1) providing a main body having an optional auxiliary device located at a first side thereof;

(2) providing a feeding unit for feeding sheets of recording paper, located at a second side of the main body; and

(3) providing a feeding unit assembly removably mounted at a central portion of the main body, for transporting the sheets of recording paper from the feeding unit, the feeding unit assembly having a jammed paper removing means for improved removal of a jammed sheet of paper, wherein

said [jammed paper removing means comprising] feeding unit assembly

comprises:

a rectangular base member having an upper face; and

[at least one cover plate mounted on an upper face of the base member;

paper feeding means for feeding the sheets of recording paper, said paper feeding means mounted at the base member and the cover plate; and]

a guiding means for guiding a backward and forward movement of the feeding unit assembly[.];

said jammed paper removing means comprises

34 at least one cover plate mounted on the upper face of the
35 base member, said cover plate comprising [wherein: at
36 least one cover plate of said jammed paper removing
37 means comprises] a hinge shaft centrally located in said
38 cover plate, said hinge shaft adapted for revolving said
39 cover plate; and
40 an elastic spring member [is provided] located between the
41 cover plate and the base member; and
42 a paper feeding means for feeding the sheets of recording paper is
43 mounted at the base member and the cover plate.